WHAT IS CLAIMED IS:

10

15

20

- 1. A control apparatus using a brain wave signal, said apparatus comprising:
- a first storing means for pre-storing descriptions (referred to as operation descriptions from here on) of a plurality of types of operations, each of which is to be performed on an apparatus to be controlled, and a plurality of brain wave patterns being respectively associated with the descriptions of the plurality of types of operations;
- a second storing means for pre-storing a plurality of control data each of which is used for causing an apparatus to be controlled carry out an operation specified by a corresponding operation description stored in said first storing means;
- a brain wave detecting means for detecting a brain wave signal from a user's head;
- a brain wave pattern generating means for generating a brain wave pattern based on the brain wave signal detected by said brain wave detecting means;
- a brain wave pattern comparison means for comparing the brain wave pattern generated by said brain wave pattern generating means with the plurality of brain wave patterns stored in said first storing means, and for, when there exists a brain wave pattern substantially matching the generated brain wave pattern in said first storing means, identifying an operation description associated with this brain wave pattern substantially matching the generated brain wave pattern; and
 - a signal processing means for reading control data

corresponding to said identified operation description from said second storing means so as to generate a control signal causing an apparatus to be controlled carry out an operation specified by said identified operation description.

- 2. The control apparatus using brain wave signals according to Claim 1, wherein said apparatus to be controlled is a vehicle-mounted apparatus and said signal processing means sends out the generated control signal to the vehicle-mounted apparatus.
- 3. The control apparatus using brain wave signals according to Claim 1, wherein when receiving an instruction for associating a brain wave pattern generated by said brain wave pattern generating means with an operation description displayed on a display means, the operation description specifying an operation to be performed on an apparatus to be controlled, said first storing means stores the generated brain wave pattern therein while associating it with the operation description.
- 4. The control apparatus using brain wave signals according to Claim 2, wherein when receiving an instruction for associating a brain wave pattern generated by said brain wave pattern generating means with an operation description displayed on a display means, the operation description specifying an operation to be performed on an apparatus to be controlled, said first storing means stores the generated brain wave pattern therein while associating it with the operation description.

- 5. The control apparatus using brain wave signals according to Claim 3, wherein said first storing means has a plurality of storing areas in each of which a plurality of brain wave patterns respectively associated with a plurality of operation descriptions are stored, the plurality of storing areas being associated with a plurality of users, respectively, and said brain wave pattern comparison means compares the brain wave pattern generated by said brain wave pattern generating means with the plurality of brain wave patterns stored in a storing area of said first storing means, said storing area being specified by input identification data that identifies a corresponding user.
- 6. A control apparatus using a brain wave signal, said
 15 apparatus comprising:

10

20

25

- a brain wave detecting means for detecting a brain wave from a user's head so as to generate a brain wave signal;
- a moving object information detecting means for detecting a change of a status of a moving object; and
- a security determination means for sending out an electric wave indicating a notification that said moving object has been stolen when said moving object information detecting means detects a change of the status of said moving object while said brain wave detecting means does not detect any brain wave.
- 7. The control apparatus using brain wave signals according to Claim 6, wherein said moving object information detecting means is a position detecting means for detecting a current position of said moving object, and, when detecting

a change of the current position of said moving object by using said position detecting means while said brain wave detecting does not detect any brain wave, said security determination means sends out an electric wave indicating a notification that said moving object has been stolen,

The control apparatus using brain wave signals according to Claim 6, wherein said moving object information detecting means is an engine start detecting means for detecting a start of an engine of said moving object, and, when detecting a start of the engine of said moving object by using said engine start detecting means while said brain wave detecting means does not detect any brain wave, said security determination means sends out an electric wave indicating a notification that said moving object has been stolen.

10

15

25

- The control apparatus using brain wave signals according to Claim 6, wherein said moving object information detecting means is a velocity detecting means for detecting 20 a velocity of said moving object, and, when detecting a movement of said moving object by using said velocity detecting means while said brain wave detecting means does not detect any brain wave, said security determination means sends out an electric wave indicating a notification that said moving object has been stolen.
 - 10. The control apparatus using brain wave signals according to Claim 6, wherein said security determination means transmits an electric wave indicating a notification that said moving object has been stolen to a predetermined

management center.

- 11. The control apparatus using brain wave signals according to Claim 6, wherein said security determination means transmits an electric wave indicating a notification that said moving object has been stolen to a predetermined communication terminal.
- 12. The control apparatus using brain wave signals according to Claim 11, wherein said predetermined communication terminal is a communication terminal owned by a user associated with identification data preset by said security determination means.
- 13. The control apparatus using brain wave signals according to Claim 6, wherein the electric wave sent out by said security determination means includes current position information indicating a current position of said moving object.